The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application. Any changes or deletions are without prejudice or disclaimer of Applicants' right to present prior versions at a later time--e.g., in this application or in a continuing application.

Listing of The Claims:

1. (Canceled).

2. (Currently Amended) The circuit of ~~Claim 1~~ Claim 6, wherein the input signal is a SCSI (small computer system interface) signal and the adaptive filter is configured to reduce ~~reduces~~ inter-symbol interference (ISI) in the SCSI signal based on the ~~known training pattern~~ amplification control signal.

3. (Currently Amended) The circuit of ~~Claim 1~~ Claim 6, wherein the predetermined frequency range amplified by the adaptive filter consists of high frequency components of the input signal.

4. (Currently Amended) The circuit of ~~Claim 1~~ Claim 6, wherein the adaptive filter is a third order Bessel filter.

5. (Canceled).

6. (Currently Amended) A circuit for adaptively amplifying an input signal, the circuit comprising:

an adaptive filter connected to receive the input signal and to amplify a predetermined frequency range of the input signal by an amount based on an

amplification control signal input to the adaptive filter to generate an amplified input signal;

a comparator connected to receive the amplified input signal from the adaptive filter and a predetermined threshold signal, the comparator outputting a comparison signal ~~that compares~~ based on a comparison of the amplified input signal to the predetermined threshold signal; and

a filter adaptation circuit connected to receive the comparison signal and to modify the amplification control signal based on the comparison signal and a known training pattern~~; and~~

~~a digital-to-analog converter connected between the adaptive filter and the filter adaptation circuit, the digital-to-analog converter converting a digital version of the amplification control signal output from the filter adaptation circuit to an analog version of the amplification control signal for input to the adaptive filter~~, wherein the filter adaptation circuit comprises:

a first circuit connected to receive the comparison signal, the known training pattern, and a system clock signal, the first circuit converting the comparison signal, the known training pattern, and the system clock signal into a first output signal that is asserted on a falling edge of the known training pattern when the comparison signal indicates that the input signal is above a level of the predetermined threshold signal and a second output signal that is asserted on the falling edge of the known training pattern when the comparison signal indicates that the input signal is below the level of the predetermined threshold signal; and

a second circuit connected to receive the first and second output signals and to increase the amplification control signal when the first output signal is asserted and the second output signal is not asserted and to decrease the amplification control signal when the first output signal is not asserted and the second output signal is asserted.

7-11. (Canceled).

12. (Currently Amended) The circuit of ~~Claim 1~~ Claim 6, wherein the comparison signal indicates whether the amplified input signal is greater than the predetermined threshold signal.

13. (New) The circuit of Claim 6, further comprising a digital-to-analog converter connected between the adaptive filter and the filter adaptation circuit, the digital-to-analog converter converting a digital version of the amplification control signal output from the filter adaptation circuit to an analog version of the amplification control signal for input to the adaptive filter.

14. (New) A method for adaptively amplifying an input signal, the method comprising:

amplifying a predetermined frequency range of the input signal by an amount based on an amplification control signal to generate an amplified input signal;

comparing the amplified input signal with a predetermined threshold level to generate a comparison signal;

converting the comparison signal, a known training pattern, and a system clock signal into a first output signal that is asserted on a falling edge of the known training pattern when the comparison signal indicates that the input signal is above the predetermined threshold level and a second output signal that is asserted on the falling edge of the known training pattern when the comparison signal indicates that the input signal is below the predetermined threshold level;

increasing the amplification control signal when the first output signal is asserted and the second output signal is not asserted; and

decreasing the amplification control signal when the first output signal is not asserted and the second output signal is asserted.

15. (New) The method of Claim 14, wherein the input signal is a SCSI (small computer system interface) signal and wherein amplifying ~~a~~ the predetermined frequency range of the input signal by ~~an~~ the amount based on ~~an~~ the amplification control signal comprises reducing inter-symbol interference (ISI) in the SCSI signal based on the amplification control signal.

16. (New) The method of Claim 14, wherein amplifying ~~a~~ the predetermined frequency range of the input signal by ~~an~~ the amount based on ~~an~~ the amplification control signal comprises amplifying high frequency components of the input signal.

17. (New) The method of Claim 14, wherein amplifying ~~a~~ the predetermined frequency range of the input signal by ~~an~~ the amount based on ~~an~~ the amplification control signal comprises carrying out a third order Bessel filter on the input signal based on the amplification control signal.